

FLAGSTAFF
WILDLAND URBAN INTERFACE
CODE



Process:

- ❖ *2006 International WUI Code*
- ❖ Modified w/local amendments
- ❖ Development began in Fall 06
- ❖ Extensive outreach and collaboration
- ❖ Adopted by Council in Feb 08
- ❖ Effective Mar 08

Relationship to International Fire Code (IFC):

- ❖ **WUI Code adoption occurred in-tandem with adoption of 2006 IFC**
(replaced existing Uniform Fire Code)
- ❖ **Components of IFC which complement WUI Code:**
 - *Prohibits wood shingles (historic & decorative exceptions)*
 - *Cancels firework permits when Fire Danger Rating reaches Very High or greater*

Why a WUI Code?:

- ❖ **Wildfire #1 fire threat:**
 - *Ranked 1st in AZ (2003)*
 - *Risk & Consequences = High*
- ❖ **Consistent w/other national model codes:** *ex: Building, Fire, etc*
- ❖ **Public Safety, Quality of Life, Economic Development**
- ❖ **Remain current w/technology, knowledge, and standards**

Why a WUI Code?:

❖ Evolution of *FireWise* efforts:
Structures and Ecosystem

3-E's

Education

Engineering

Enforcement

WUI CODE Specifics:

- Requirements are not new to the Flagstaff: 1996-2007 –
 - *10,000 acres in city were treated, including*
 - *38 new subdivisions*
- Adoption provides specificity to our successful and on-going effort
- Public comments were received and largely integrated into final Code



Where does WUI Code Apply?

- Required Flagstaff to designate the the “Interface”: *Code applies within this area*
- Includes most of community
- Community is surrounded by, and built into, the largest continuous ponderosa pine forest in the world

City of Flagstaff Wildland/Urban Interface



This map of Flagstaff shows the Wildland/Urban Interface Zone

-  Non-Interface Zones
-  City Limits

This map provides a reference of the general locations of Wildland Urban Interface areas within the City of Flagstaff. The Flagstaff Fire Department maintains the sole authority to make any determinations of a specific area's classification.

μ

1
Miles

Specifics:

- Defensible Space is the entire property
- Property Maintenance – *personal responsibility*
 - *Hazard Tree removal*
 - *Proximity to chimneys & roofs*
 - *Flammable weed/debris removal*
- Flame spread rating, not traditional fire resistive rating
- Exterior Ignition Resistant (IR) construction materials to match hazard severity (*Fuel & Slope*) & improvements (*Water*)

FIRE HAZARD SEVERITY

FUEL MODELS		SLOPE	
	$\leq 10\%$	11–29%	$\geq 30\%$
<i>Light</i>	<i>Moderate</i>	<i>Moderate</i>	<i>High</i>
<i>Medium</i>	<i>Moderate</i>	<i>High</i>	<i>Extreme</i>
<i>Heavy</i>	<i>High</i>	<i>Extreme</i>	<i>Extreme</i>

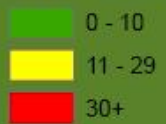
IGNITION RESISTENT (IR) CONSTRUCTION

HAZARD	WATER	SUPPLY
	<i>Conforming</i>	<i>Non-Conforming</i>
<i>Moderate</i>	<i>IR 3</i>	<i>IR 2</i>
<i>High</i>	<i>IR 2</i>	<i>IR 1</i>
<i>Extreme</i>	<i>IR 1</i>	<i>IR 1</i>

City of Flagstaff Percent Slope

This map of Flagstaff shows the slope percentages

Slope Percent



1
Miles

IR CONSTRUCTION MATRIX

IR 1	IR 2	IR 3
<i>Class A Flame Spread:</i> ▪ <i>Siding</i> <i>(non-combustible)</i> ▪ <i>Eaves</i>	<i>Class B Flame Spread:</i> ▪ <i>Siding</i> <i>(w/options)</i> ▪ <i>Eaves</i>	<i>Class C Flame Spread:</i> ▪ <i>Siding & Eaves</i> <i>(any material)</i>
<i><u>Attic Openings</u></i> <i>w/wire</i>	<i><u>Attic Openings</u></i> <i>w/wire</i>	<i><u>Attic Openings</u></i> <i>any material</i>
<i><u>Windows</u></i> <i>double-pane or tempered glass</i>	<i><u>Windows</u></i> <i>double-pane or tempered glass</i>	<i><u>Windows</u></i> <i>any material</i>

**IR2 Options: Non-combustible Wainscotting
Fire Resistive vegetation**

MATERIAL COST ANALYSIS

<u>Material</u>	<u>\$/Sq Ft</u>
<i>Fir Siding</i>	<i>\$1.16</i>
<i>Innerseal</i>	<i>\$.96</i>
<i>Cottage Lap</i>	<i>\$.97</i>
<i>Hardo Siding (Hardie-panel)</i>	<i>\$1.01</i>
<i>Cedar Mill Prim (Hardi-plank)</i>	<i>\$.94</i>
<i>Log Cabin Siding</i>	<i>\$1.93</i>
<i>Western Red Cedar Siding</i>	<i>\$2.53</i>

FireWise materials are cost-neutral

Application:

❖ New Structures & Subdivisions

- *Plans Review – Fire Inspectors (FI) & Fire Management (FM) Staff*
- *Determination of requirements:*
 - *Forest Treatments – FM (Foresters, Arborists, Wildland Fire Specialists)*
 - *IR Construction (+IFC standards) – FI*
- *Site Inspections – Building, FI & FM Staff*

❖ Existing Structures & Neighborhoods

- *Complaint-based inspections*
- *Strategic, periodic, Neighborhood reviews*

Application (cont):

- ❖ Each community is different
- ❖ Enforcement levels vary
- ❖ Other:
 - *Suppression*
 - *“Shelter in Place” option*
 - *FireWise Neighborhoods*

Contact:

❖ Flagstaff Fire Dept

Fire Management

211 W. Aspen

Flagstaff AZ 86001

928.779.7688

928.556.1207

❖ E-mail: *fuelmanagement@flagstaffaz.gov*

❖ Web-site: *flagstaffaz.gov/fuelmanagement*